DOCUMENT RESUME

ED 386 004 EC 304 206

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TITLE Pennsylvania's Special Education Formula: Early Results.
PUB DATE 10 Mar 95
NOTE 19p.; Paper presented at the Annual Meeting of the American Education Finance Association (Savannah, GA, March 10, 1995).
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Change Strategies; *Disabilities; Educational Finance; Educational Policy; Elementary Secondary Education; Expenditure per Student; *Financial Policy; Financial Problems; Fiscal Capacity; Mainstreaming; *Program Costs; *School District Spending; *Special Education; *State Aid; State School District Relationship; Student Placement
IDENTIFIERS *Pennsylvania

ABSTRACT

The impact of changes in Pennsylvania's special education program rules and financing system during the first 2 years of implementation (1991-92 and 1992-93) are considered. Policy objectives were: to control escalating state expenditures for special education, to give school districts greater control over special education expenditures, and to reduce the number of students identified for special education programs by using instructional support and provision of services in the regular classroom. Information is presented on controlling state and local costs through special education formula funding. Factors hypothesized to influence a district's inability to control its special education costs are analyzed, including poverty, total expenditures per pupil, percentage of special education pupils, percentage of children with severe disabilities, level of intervention, and program control. Data are provided on: school district enrollments; numbers of students receiving special education, including the location of the service delivery and provider of the service; total school district expenditures; special education expenditures; and state support of special education expenditures through the new formula. Data are also provided on special education expenditures per student and special education as a percentage of total expenditures. Initial results for the first 2 years suggest that the aims of policymakers generally are being realized, although not uniformly throughout the state. Suggestions for a continuing research agenda are offered for policymakers. Four tables present the data. (SW)

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ED 386 004

PENNSYLVANIA'S SPECIAL EDUCATION FORMULA: EARLY RESULTS*

Robert E. Feir**

Introduction

Pennsylvania -- long a leader in special education -- enacted major revisions of both its special education program rules and financing system in 1990 and 1991. These changes are described in considerable detail elsewhere[1]*** and are summarized in the next section.

The purpose of this paper is to analyze the impact of these changes -- particularly the fiscal changes -- during the first two years of implementation. Initial results suggest that the aims of policymakers in 1990 and 1991 generally are being realized, although not uniformly throughout the state. Because complete and final data are available only for two years, clear trend lines and firm conclusions about the effectiveness of the policy changes are difficult to draw. The paper concludes with suggestions for a continuing research agenda to inform future policymaking in the area of special education finance.

Background

Three years before Congress passed the initial Education for All Handicapped Children Act,[2] Pennsylvania entered into a federal court consent agreement to locate and educate all children with mental retardation in the state.[3] Less than a year before the state entered into the PARC consent agreement, the General Assembly replaced the 67 county superintendents with 29 intermediate units (regional education service agencies), and the intermediate units (IUs) soon took on the major responsibility for planning and operating special education programs.

Special education programs operated under State Board of Education regulations which included provisions for mainstreaming, but which emphasized separate program operation; in fact, in order to be eligible for special education funding, programs were required to be offered outside of regular classes.[4]

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* This paper was prepared for presentation at the annual meeting of the American Education Finance Association in Savannah, March 10, 1995.

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*** Notes appear at the end of the text.

EC 304206

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Throughout the development and expansion of special education in this country, Pennsylvania had the distinction of being the only state with a statutory requirement to pay 100 percent of the "excess costs" of educating special education students and the further distinction of defining both gifted children and those with disabilities as eligible for special education.[5]

This fiscal policy provided incentives to establish increasing numbers of special education programs, and some more arcane aspects of the statute made it more advantageous for those programs to operate under the aegis of the intermediate units.[6] The incentives led to the opening of many needed programs, but also to over-identification, labeling, and maintaining students in special education longer than necessary, placement in more restrictive settings than necessary, and a "drift" of expenditures from other categories into special education.[7]

During the 1980s, special education programs in Pennsylvania grew rapidly, and the statutory requirement to fund them fully outstripped the General Assembly's budgetary inclination in a time of increasing demands for prison construction, medical assistance and other welfare programs, and senior citizen programs.

Elementary and secondary school enrollments declined every year during the 1980s, but special education enrollments increased in six of those ten years, resulting in a major increase in the percentage of all public school students receiving special education services.

While it was invisible to most people for several years, a crisis in special education finance began to brew in the early 1980s. At the end of the 1981-82 fiscal year, the state was $2 million short in its obligations to school district special education funding. The deficit was "rolled over" and paid out of 1982-83 appropriations. By the end of the 1987-88 fiscal year, the debt had grown to $50 million. By 1988-89, it was $104 million, and serious attention began to be paid by legislators, who appropriated $99 million to pay the debt, and by the Department of Education. The 1989-90 budget was $89 million short, and the failure of the General Assembly to accept the Governor's proposals for change in 1990-91 resulted in an additional shortfall of $147 million.

Summary of 1990-91 Policy Changes

Two sets of policy changes were enacted in 1990 and 1991.

On July 1, 1989, the State Board of Education was ordered by the legislature to revise the special education program regulations no later than March 1, 1990. The General Assembly wanted the regulations to provide for "fiscal accountability, prudent management, appropriate

education support services and special classes to meet the needs of pupils, and assurance of continued service" to children in special education programs on July 1, 1989.[8]

The new regulations, representing the first major change in 14 years, were adopted February 27, 1990 and became effective four months later.[9] The most significant change was to focus on instructional needs of students rather than on their deficits. Referral for special education evaluation now must be preceded by instructional interventions of an instructional support team (IST) or a parental demand for immediate evaluation. This change is designed to lead to regular class success for more students and a reduction in unnecessary or inappropriate referrals for special education evaluation and placement. The State Board's revised regulations also included several innovations for those students who are placed in special programs. The special education curriculum must mirror the "regular" education program to the maximum extent feasible. Special services may be provided in regular classrooms and still be eligible for special education funding (the funding aspect of this change was made moot by subsequent changes in the funding system). Parental authority was increased, and the regulations provided for early intervention and postsecondary transition services, more refined IEPs, and behavior management for students needing it. Aversive discipline was prohibited, and students completing their IEPs were assured of receiving a regular high school diploma.

The State Board attempted to make available a wider array of services to meet student learning needs, so that the most expensive option -- testing for and placement in special education -- would not be the only one available to school districts. However, only legislative action could eliminate or revise the incentives implicit in the full excess costs system of special education finance.

The Governor proposed in his 1990-91 budget message a new method of funding special education programs. He offered to appropriate sufficient funds to cover excess costs for one year, but with the funds distributed according to a formula based upon local wealth and numbers of students -- not special education students or actual expenditures for special education -- and with no assurance that future increases would be related to cost increases.[10] The General Assembly did not accept the proposed change, but did enact a modified version as part of the state budget the following year (1991-92).

The new formula, which took effect in 1991-92, is not related to actual expenditures for special education or to numbers of students receiving special education services. Most of the funding is distributed on the basis of a two-part formula. In 1991-92, each district received $525 for 17 percent of its average daily membership (ADM) (presumed to be children with mild disabilities and gifted students) and $7,000 for one percent of its ADM (presumed to be children with severe disabilities). These amounts were in addition to general aid, and the special education formula did not include a wealth-based equalization factor, as the Governor had proposed initially. In subsequent years, the percentages of ADM and dollar amounts per

student have been revised by the General Assembly as the basis for appropriation increases. Neither of these factors, however, is related to actual numbers of students receiving special education services or to the costs of providing those services. Districts may use these funds to provide programs directly or in consortia with other districts or to contract with intermediate units for the operation of programs.

The new funding law provides that five percent of the annual appropriation be paid to intermediate units to maintain core services and that a contingency fund be controlled by the Secretary of Education to assist districts with severe, unanticipated problems. The contingency fund has ranged from one to two percent of the annual appropriation since its inception in 1991-92. During 1991-92, additional payments were targeted to three IUs which had operated 100 percent of special education programs in their regions. These were Philadelphia, Pittsburgh, and Schuylkill County. The payments have continued for Philadelphia and Pittsburgh in subsequent years.

For 1991-92, the General Assembly included two additional elements -- one to provide a cost-based inflation factor of five percent and the other to assure that the new formula initially would distribute at least 3.5 percent more state funds to each IU region than in the 1990-91 fiscal year. The cost of these factors was $28 million.

Finally, in passing the 1991-92 budget, the General Assembly appropriated $147 million to pay off its prior year obligation, forgave 75 percent (valued at $150 million) of district obligations to pay for prior year programs operated by IUs (and eliminated this so-called "tuition recovery" completely starting in 1992-93), and increased state funding of special education by 32 percent over 1990-91.

Since the adoption of the formula in 1991-92, the General Assembly has not altered its approach to funding special education, except to adjust the formula factors and the size of the contingency fund. In addition, it adopted a recommendation by the Governor in the spring of 1994 to appropriate a small amount to assist districts which had been particularly adversely impacted by the new system. This adjustment will be discussed briefly in the conclusion of this paper.

Implementation -- Years One and Two

The remainder of this paper is concerned with the implementation of the new special education policies in 1991-92 and 1992-93. Complete data for 1993-94 are not yet available. The paper relies upon data obtained from the Department of Education for all 501 school districts for the two years in question. Data elements include enrollment; numbers of students receiving special education, including the location of the service delivery and provider of the

service; total school district expenditures, special education expenditures, and state support of special education expenditures through the new formula.

While it would be interesting to study directly the effects of the transition between 1990-91 (the last year under the old system) and 1991-92 (the first year under the new formula), to do so runs considerable risks. Under the old system, most state funds were distributed to IUs; under the new system, almost all funds are distributed to districts. Under the old system, districts paid IUs for the "regular education" costs of special education students through tuition recovery, and those payments were made for prior year programs based upon two year old tuition rates; under the new system, tuition recovery has been eliminated. Under the old system, while full excess costs were paid by the state, payments often were made in years subsequent to those in which obligations were incurred, and the basis of payments to IUs and districts differed somewhat; under the new system, state payments are unrelated to costs incurred by districts and IUs.

For all of these reasons, a more limited analysis of the actual early implementation of the new system is undertaken here, with full recognition that few direct comparisons to the previous system can be derived from this study.

It also is clear that analyzing data from two years does not permit the identification of any clear trends, although as will be seen below, some interesting patterns do appear and should be reviewed in future years to determine whether nor not they evolve into trends.

The analysis presented here is aimed at determining the degree to which policymakers' goals have been achieved. It is aimed also at determining the degree to which implementation of new special education policies has resulted in unanticipated problems, in hopes that this information may be useful in any future revisions of the policies in question.

Policy Objectives

Three separate, albeit not unrelated, policy objectives were identified by policymakers in the early 1990s.[11] The first objective -- and the one foremost in the minds of state legislators and the Governor -- was to control the escalating state expenditures for special education. A second objective was to give school districts greater control over special education expenditures and remove the excess costs disincentive for economy so that the escalation of local costs for special education might be slowed as well. The third objective was to reduce the number of students identified for special education programs through the introduction of instructional support and to increase the percentage of students who received their special education services in regular classes, both of which were anticipated to reduce reliance on the most expensive services.

Controlling State Costs

There is no question about the effectiveness of the special education formula in capping the growth in state expenditures for special education. What the state spends each year is no longer a function of spending decisions by 501 school districts and 29 intermediate units. It is, rather, a function of the budgetary decisions of the Governor and the General Assembly.

When the Governor first proposed to formula fund special education, the Department of Education predicted that without such a change, the accumulated deficit owed to districts could actually exceed the half billion dollar annual appropriation in less than five years. While some found this alarming, school district data for 1991-92 and 1992-93 indicate net school district expenditures for special education (that is, local spending not reimbursed though the state special education formula) of about $450 million each year.

The state no longer incurs annual $100 million (or 20 percent) deficits. It no longer needs to appropriate double-digit percentage increases for special education. In fact, since appropriating the 32 percent increase needed to make the transition to the new formula, the legislature has increased the special education line item of the budget only modestly each year.

What impact has the change in special education policy had on local school districts, in terms of school finance and service delivery?

Controlling Local Costs

The most obvious is that special education now costs school districts more than it did in the past. Under the excess costs system, school districts bore practically no costs in excess of the "regular" education costs of students receiving special education. By design, the new formula reduces the state's relative share of the obligation for special education finance and shifts that burden to the school districts. In 1991-92, school district net expenditures for special education were $454.9 million; in 1992-93, they were $449.6 million.

In the aggregate, the data also suggest that the second objective of controlling the growth of local special education expenditures was achieved in the first two years of implementation of the formula. Between 1991-92 and 1992-93, school district total expenditures increased by 5.59 percent, while school district special education expenditures increased by only 3.64 percent, and net special education expenditures actually declined by 1.16 percent.

In 1991-92, special education expenditures per pupil (not per special education pupil) ranged from $214 to $1,484, with a median of $446; in 1992-93, the range was from $204 to $1,471, with a median of $435. The reduction in the range of special education

expenditures per pupil also suggests that districts have begun to control the escalation of special education costs. Of the 501 school districts, 279 experienced absolute reductions in per pupil special education expenditures, ranging from $1 to $420 (and from 0.03 percent to 63.18 percent).

In 1991-92, special education expenditures as a percentage of total expenditures ranged from 3.20 percent to 18.66 percent, with a median of 7.84 percent; in 1992-93, the range was from 1.80 percent to 17.04 percent, with a median of 7.57 percent. The reduction in the range of special education expenditures as a percentage of total expenditures adds to the picture of school districts beginning to control these costs.

Not every school district experienced such reductions, however, and even some that did still had disproportionately high special education expenditures in 1992-93 -- expressed either in per pupil terms or in terms of the share of total expenditures. While the median special education expenditure per pupil was $435 in 1992-93, there were 90 of the 501 districts with per pupil special education expenditures of at least $600, and 210 districts experienced some increase in special education expenditures per pupil. In fact, 95 of these districts experienced increases in excess of ten percent. While the median percentage of total expenditures attributable to special education was 7.57 percent, there were 63 of the 501 districts which spent at least 10 percent of their budgets on special education, and 156 districts experienced increases in the percentage of total expenditures devoted to special education.

Which districts were most likely to be unable to control the growth of special education costs? A cursory look at districts with the highest 1992-93 special education expenditures per pupil and special education expenditures as a percentage of total expenditures indicates that wealthy and poor districts, large and small districts, urban, rural, and suburban districts, are at the top of both lists. The same is true of districts with the largest increases in special education expenditures per pupil and as a percentage of total budgets.

It was hypothesized that the following factors would likely relate to a district's inability to control its special education costs:

1) Poverty: A district with low per pupil wealth (a high aid ratio) is likely to have a higher than average need for special education services.

2) Total expenditures per pupil: A district which spends a great deal on education in general is likely to spend a great deal on special education.

3) Special education pupils: A district with a high percentage of students receiving special education is likely to spend a relatively large amount of its budget to educate these students.

4) Children with severe disabilities: A district with a disproportionately high rate of students with severe disabilities is likely to have to spend more on the very expensive programs such youngsters typically need.

5) Level of intervention: A district organizing most of its special education around part-time and full-time special classes is likely to incur higher costs than a district relying primarily upon regular class instruction and itinerant services, which are less expensive to deliver.

6) Program control: A district which relies largely upon intermediate units and approved private schools is less likely to be able to control program costs than a district which operates the special education programs for most of its students.

As indicated earlier, expenditure, enrollment, district wealth, level of intervention, and program control data for all 501 districts for 1991-92 and 1992-93 were analyzed.

The dependent variables for purposes of this study were 1991-92 and 1992-93 special education expenditures and net special education expenditures per pupil; the percentage change in special education and net special education expenditures; 1991-92 and 1992-93 special education expenditures and net special education expenditures as percentages of total expenditures; and the change in special education and net special education expenditures as percentages of total expenditures.

The independent variables for purposes of this study were 1991-92 and 1992-93 aid ratios (measures of district wealth per pupil); total expenditures per pupil; special education pupils and those with severe disabilities as percentages of total enrollment, the change in such percentages, and the absolute change in numbers of special education pupils and those with severe disabilities; the percentages of students receiving special education in regular classes and itinerant programs, and in part-time and full-time special classes, and changes in those percentages; and the percentages of students receiving special education in district-, IU-, and APS-operated programs, and the changes in those percentages.

Correlations and regressions were run to determine relationships among the dependent and independent variables, and the patterns of such relationships. The results of these analyses are described below and summarized on the four tables which follow.

Table 1 displays the statistically significant relationships of several independent variables with the dependent variables for 1991-92 and 1992-93 special education expenditures per pupil and the percentage change in special education expenditures.

TABLE 1. Special Education Expenditures Per Pupil

Variable	Correlation	R^2	Sig F
1991-92 Special Ed. Exp./Pupil:			
Total Exp./Pupil	.58062	.33712	.00000
Spec. Ed. as % of Pupils	.49478	.24481	.00000
PT/FT as % of Spec. Ed. Placements	.33457	.11939	.00000
Severe Dis. as % of Pupils	.32096	.10302	.00000
Aid Ratio	-.26719	.07135	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.25097	.06299	.00000
1992-93 Special Ed. Exp./Pupil:			
Total Exp./Pupil	.55142	.30406	.00000
Spec. Ed. as % of Pupils	.53673	.28808	.00000
Severe Dis. as % of Pupils	.38972	.15188	.00000
PT/FT as % of Spec. Ed. Placements	.29219	.08537	.00000
Aid Ratio	-.27556	.07593	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.19086	.03643	.00002
% Change in Special Ed. Exp.:			
% Change in Severe Dis. as % of Pupils	.14244	.02029	.00139
Change in PT/FT as % of SE Placements	-.09946	.00989	.02600
Change in Reg./Itin. as % of SE Placements	.09900	.00980	.02671

The strongest relationship with special education expenditures per pupil in both years is total expenditures per pupil, explaining about one-third of the variance each year. About one-fourth of the variance each year is explained by the percentage of pupils enrolled in special education, and the percentage of students with severe disabilities adds to that explanatory power. The percentage of students in part-time and full time classes correlates positively with special education expenditures per pupil, while the percentage in regular classes and itinerant programs correlates negatively. However, in examining the percentage change in special education expenditures from one year to the next, there is a positive correlation with the change in regular and itinerant classes as a percentage of all programs and a negative correlation with the change in part-time and full-time classes as a percentage of the total, although the regression analysis suggests that each explains only about one percent of the variance in the dependent variable.

Table 2 displays the statistically significant relationships of several independent variables with the dependent variables for 1991-92 and 1992-93 special education expenditures as a percentage of total expenditures and the change in special education expenditures as a percentage of total expenditures.

TABLE 2. Special Education as a Percentage of Total Expenditures

Variable	Correlation	R^2	Sig F
1991-92 Spec. Ed. as % of Total Exp.:			
PT/FT as % of Spec. Ed. Placements	.45195	.20425	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.39196	.15363	.00000
Spec. Ed. as % of Pupils	.35040	.12278	.00000
Aid Ratio	.13466	.01813	.00253
1992-93 Spec. Ed. as % of Total Exp.:			
Spec. Ed. as % of Pupils	.39196	.15363	.00000
PT/FT as % of Spec. Ed. Placements	.38040	.14470	.00000
Severe Dis. as % of Pupils	.35856	.12856	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.29916	.08950	.00000
Aid Ratio	.10679	.01140	.01680
Change in Spec. Ed. as % of Total Exp.:			
Change in Severe Dis. as % of Pupils	.11444	.01310	.01036
Change in Reg/Itin as % of SE Placements	.11118	.01236	.01277
Change in PT/FT as % of SE Placements	-.09463	.00895	.03421

In trying to explain variations in special education expenditures as a percentage of total expenditures, the independent variables that are most powerful are those related to placement options (part-time and full-time classes correlate positively and regular and itinerant classes correlate negatively with special education expenditures as a share of the budget in both years). Higher percentages of students receiving special education correlate positively with higher percentages of the budget devoted to those services, and for 1992-93, the percentage of students with severe disabilities explains almost 13 percent of the variance.

The year-to-year change in special education expenditures as a percentage of total expenditures shows the same anomalous correlation described above: increases in part-time and full-time enrollments correlate negatively, while increases in regular class and itinerant instruction correlate positively.

Table 3 displays the statistically significant relationships of several independent variables with the dependent variables for 1991-92 and 1992-93 net special education expenditures per pupil and the percentage change in net special education expenditures.

TABLE 3. Net Special Education Expenditures Per Pupil

Variable	Correlation	R^2	Sig F
1991-92 Net Spec. Ed. Exp./Pupil:			
Total Exp./Pupil	.53820	.28966	.00000
Spec. Ed. as % of Pupils	.39181	.15352	.00000
Severe Dis. as % of Pupils	.31414	.09869	.00000
PT/FT as % of Spec. Ed. Placements	.30122	.09073	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.26879	.07225	.00000
Aid Ratio	-.26105	.06815	.00000
1992-93 Net Spec. Ed. Exp./Pupil:			
Total Exp./Pupil	.50789	.25796	.00000
Spec. Ed. as % of Pupils	.50699	.25704	.00000
Severe Dis. as % of Pupils	.35197	.12389	.00000
Aid Ratio	-.29357	.08618	.00000
PT/FT as % of Spec. Ed. Placements	.27398	.07507	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.18645	.03476	.00003
% Change in Net Spec. Ed. Exp.:			
Change in % IU Served	.09720	.00945	.02961
Change in % IU and APS Served	.09708	.00942	.02981

The analysis of the variance in net special education expenditures per pupil for 1991-92 and 1992-93 shows results very much like those for special education expenditures per pupil. The only difference is that significant correlations appear for the first time between the percentage change in net special education expenditures and changes in the percentage of non-district-operated programs.

Table 4 displays the statistically significant relationships of several independent variables with the dependent variables for 1991-92 and 1992-93 net special education expenditures as a percentage of total expenditures and the change in net special education expenditures as a percentage of total expenditures.

TABLE 4. Net Special Education as a Percentage of Total Expenditures

Variable	Correlation	R^2	Sig F
1991-92 Net Spec. Ed. as % of Total Exp.:			
PT/FT as % of Spec. Ed. Placements	.36548	.13357	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.35287	.12452	.00000
Severe Dis. as % of Pupils	.30721	.09438	.00000
Spec. Ed. as % of Pupils	.30242	.09146	.00000
Total Exp./Pupil	.26415	.06977	.00000
1992-93 Net Spec. Ed. as % of Total Exp.:			
Spec. Ed. as % of Pupils	.44883	.20145	.00000
Severe Dis. as % of Pupils	.35706	.12749	.00000
PT/FT as % of Spec. Ed. Placements	.32876	.10808	.00000
Total Exp./Pupil	.31233	.09755	.00000
Reg./Itin. as % of Spec. Ed. Placements	-.24566	.06035	.00000
Aid Ratio	-.13170	.01735	.00314
Change in Net Spec. Ed. as % of Total Exp.:			
Change in % IU and APS Served	.53324	.28434	.00000
Change in % IU Served	.53277	.28385	.00000
% Change in Spec. Ed. Pupils	.10820	.01171	.01540

Again, the analysis of net special education expenditures as a percentage of total expenditures indicates correlations very similar to those for special education expenditures as a percentage of total expenditures, except that the change in net special education

expenditures as a percentage of the total shows strong correlations with non-district-operated programs.

What do the data indicate with regard to the hypotheses stated previously?

1) Poverty: There is little significant correlation between low-wealth districts and districts with high levels of special education expenditures. Except in the case of 1992-93 special education expenditures as a percentage of total expenditures, all significant correlations with aid ratio actually are negative, and in all cases aid ratio contributes relatively little to explaining spending variations.

2) Total expenditures per pupil: This variable shows the strongest correlation of any with 1991-92 and 1992-93 special education expenditures per pupil and net special education expenditures per pupil and contributes significantly, but to a lesser degree, to explaining variations in net special education expenditures as a percent of total expenditures for both years.

3) Special education pupils: This has one of the three strongest correlations with 1991-92 and 1992-93 special education and net special education expenditures per pupil, special education as a percentage of total expenditures for both years and net special education as a percentage of total expenditures for 1992-93.

4) Children with severe disabilities: While there were positive correlations between this variable and several of the special education expenditure variables, the regression analysis tended to "wash out" percentage of children with severe disabilities, when percentage of children receiving special education and receiving services in part-time and full-time classes were entered into the analysis.

5) Level of intervention: As predicted, part-time/full-time and regular/itinerant service variables both

correlated with special education and net special education expenditures -- on a per pupil basis and as a share of total budgets. Districts relying more heavily on part-time and full-time classes experienced higher costs; those relying on regular class and itinerant instruction experienced lower costs. However, year-to-year changes in special education expenditures per pupil and as a share of the budget showed correlations opposite those predicted for the level of intervention variables.

6) Program control: there were few statistically significant correlations between percentage of students served in district-, IU-, and APS-operated programs and any of the dependent variables. However, small correlations do appear for changes in year-to-year program control and changes in net special education expenditures per pupil, and strong correlations appear for changes in net special education expenditures as a percentage of total expenditures.

Changing Service Delivery Patterns

The new special education regulations adopted by the State Board of Education encourage more regular class service and pre-special education intervention, in order to assure more appropriate and less costly service delivery. These regulatory changes have entered into the broader context of national discussions of "inclusion." How much inclusionary special education service was provided in 1991-92 and 1992-93?

In 1991-92, only 1.91 percent of students in special education received services in regular classrooms, ranging from a high of 70.38 percent (in a district with a very large number of gifted students) to a low of none (in 253 of 501 districts). When regular and itinerant services are combined, 53.11 percent were served in these configurations in 1991-92, ranging from 12.12 percent to 90.26 percent. During the same year, 31.85 percent of students received special education in separate part-time or full-time classes, ranging from 3.15 percent to 80.29 percent.

In 1992-93, the percentage of students in special education who received services in regular classrooms increased slightly to 2.03 percent, ranging from a high of 65.75 percent (in a district with a very large number of gifted students) to a low of none (in 208 of 501

districts). When regular and itinerant services are combined, 52.70 percent were served in these configurations (a slight decrease from 1991-92), ranging from 7.32 percent to 93.36 percent. During the same year, 31.62 percent of students received special education in separate part-time or full-time classes, ranging from 2.82 percent to 85.37 percent.

These data suggest that during 1991-92 and 1992-93 there was no significant aggregate change in service delivery patterns, although 56 districts increased their share of regular class service by at least two percentage points, and 76 districts increased their share of regular class and itinerant service by a least five percentage points.

There were significant shifts, however, in patterns of program control. In 1991-92, 32.14 percent of students in special education programs were served by IUs, and another 1.55 percent were served by approved private schools. The next year, only 21.47 percent were served by intermediate units, and 1.32 percent by APSs.

There was also a slight decrease in the total special education population from 285,149 in 1991-92 to 281,756 in 1992-93.

Conclusions

Several conclusions can be drawn from the research presented here; future research is needed to determine if trends evolve from the patterns reported here.

First, changes in state special education policy in Pennsylvania have effectively capped the state's growing obligation to support special education.

Second, there is some preliminary aggregate evidence that school districts have been able to reduce their growing obligations to special education as well.

Third, districts least able to control costs are those with expensive educational programs in general, high percentages of students enrolled in special education, and high percentages of students receiving those services in part-time or full-time classes.

Fourth, fiscal policy changes adopted by the General Assembly were designed to reduce school district reliance on intermediate units, and this appears to have occurred and to be related to reductions in net special education expenditures of school districts.

Fifth, program policy changes adopted by the State Board were designed to reduce special education placements and to increase the percentage of those receiving their special education in regular classes. Between 1991-92 and 1992-93 there was an insignificant reduction in the number of special education students and an insignificant increase in the

percentage served in regular classes. By 1992-93, there were still six times as many special education students being served in full-time special education classes as in regular classes.

Continuing Problems, Future Research

It is clear that a number of school districts are still having trouble controlling their costs of special education. In the spring of 1994, the General Assembly approved a recommendation by the Governor to spend an additional $10.6 million in 1994-95 to help school districts with special education expenditures as a percentage of total expenditures which exceed 150 percent of the statewide average.

Continuing research along the lines reported here will show whether districts are able to control expenditure growth for special education programs. It also will show policymakers the characteristics of districts that cannot effectively control costs, even if the statewide patterns reported here become a clearer trend. Such results could support additional efforts to fine-tune the formula. In addition, such research might show districts methods by which other districts have been able to control costs. These might include (if 1991-92 and 1992-93 patterns continue) reducing special education placements (through effective pre-referral intervention), reducing the use of part-time and full-time classes, and reducing reliance upon intermediate units and approved private schools to operate programs.

All of this research is purely quantitative, however. It cannot address issues of program quality, student achievement, or parent and educator satisfaction. All of these are legitimate and important areas for future research if a clear picture of the efficacy of the special education program and fiscal policy changes adopted in Pennsylvania in 1990 and 1991 is to emerge.

Notes

1. Robert E. Feir. "Refining Pennsylvania's Funding Mechanism and Program Rules for Special Education." Paper presented at the annual meeting of the American Education Finance Association, 1992.

2. 20 U.S.C. § 1400 *et seq.*

3. PARC *v.* Commonwealth, 334 F. Supp. 1257 (E.D. Pa. 1971) and 343 F. Supp. 279 (E.D. Pa. 1972).

4. 22 Pa. Code Chapter 13.

5. National Association of State Directors of Special Education. *A Description of State Funding Procedures for Special Education in the Public Schools*. Washington: NASDSE, 1982.

6. Section 2509 of the Public School Code of 1949 (24 P.S. § 25-2509).

7. Mary T. Moore *et al. Finetuning Special Education Finance: A Guide for State Policymakers.* Washington: Educational Testing Service, 1982.

8. Act of July 1, 1989 (P.L. 253, No. 43).

9. 22 Pa. Code Chapter 14.

10. Robert P. Casey. *1990-91 General Fund Budget.* Harrisburg, 1990.

11. Robert P. Casey. *1991-92 General Fund Budget.* Harrisburg, 1991; Pennsylvania State Board of Education. *Report on Special Education.* Harrisburg, 1990; Task Force on the Education of Students with Disabilities. *Quality Education, Preparation for Life.* Harrisburg, 1988.